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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,749	01/28/2004	Ira Tabas	60921-A/JPW/AJM/MVM	6443

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EXAMINER	
BUNNER, BRIDGET E	

ART UNIT	PAPER NUMBER
1647	

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07/31/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/767,749	TABAS, IRA	
	Examiner	Art Unit	
	Bridget E. Bunner	1647	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,27,50,53,62 and 65-67* is/are pending in the application.

4a) Of the above claim(s) *65-67* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,27,50,53 and 62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1,2,27,50,53,62 and 65-67* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 August 2004 and 28 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Application, Amendments and/or Claims

The amendment of 05 May 2008 has been entered in full. Claims 1, 2, and 27 are amended. Claims 3-26, 28-49, 51-52, 54-61, and 63-64 are cancelled.

Claims 65-67 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 14 November 2006. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

Claims 1, 2, 27, 50, 53, 62 are under consideration in the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-2, 27, 50, 53, 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houser et al. (Cardiovascular Pathol 9(6): 317-322, 2000) in view of Kellner-Weibel et al. (Arterioscler Thromb Vasc Biol 18: 423-431, 1998). The basis for this rejection is set forth for claims 1-2, 27, 50, 53, and 62 at pages 3-5 of the previous Office Action (31 October 2007).

Applicant's arguments (05 May 2008), as they pertain to the rejection have been fully considered but are not deemed to be persuasive for the following reasons.

(i) At the bottom of page 5 through the top of page 6 of the Response of 05 May 2008, Applicant argues that the Examiner is incorrectly and improperly referring to what is inherently disclosed in Houser et al. Applicant asserts that inherency can never be a proper basis for an obviousness rejection. Applicant also submits that the Examiner is incorrectly and improperly referring to additional references which are not cited in the grounds for rejection. Applicant concludes that Houser et al. teaches none of the elements of applicant's claims and is not properly used as a primary reference.

Applicant's arguments have been fully considered but are not found to be persuasive. Specifically, Applicant does not cite any support as to why inherency can never be a proper basis for an obviousness rejection. Furthermore, chemical compounds and their properties are inseparable (In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA1963)), as are their processes and yields (In re Von Schickh, 362 F.2d 821, 150 USPQ 300 (CCPA 1966)). The Examiner cited Lange et al. 1994, Mazzone et al. 1995 and Aikawa et al. 1994 (previously annotated on the PTO-892 of 13 February 2008) simply as evidence that the state of the art at the time the invention was made recognized that progesterone is an amphiphilic compound and that it inhibits intracellular transport of cholesterol.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). As discussed in the previous Office Action of 31 October 2007, Houser et al. teach that hypercholesterolemic male New Zealand white rabbits are administered doses of the amphiphilic (or amphipathic) compound,

progesterone (pg 318, col 1). Houser et al. disclose that feeding the rabbits a C-enriched diet for a relatively short period of time results in advanced aortic atherosclerotic plaques that contain foam cell macrophages and smooth muscle cells histologically similar to human atherosclerosis (pg 320, col 1, first paragraph). Houser et al. teach that high doses of 17-hydroxyprogesterone are significantly associated with less aortic plaque load than controls (abstract; pg 320, col 1-2; page 317, bottom of column 2). Houser et al. does not teach the administration of an amphipathic/amphiphilic amine. Kellner-Weibel et al. teach that the amphipathic amine, U18666A, modulates intracellular trafficking of cholesterol (see abstract). Kellner-Weibel et al. also disclose that the toxic effect of free cholesterol can be eliminated or moderated by the treatment of macrophages with U18666A in a model foam cell culture system (page 428, column 2, first full paragraph; page 429, last paragraph in column 2). Specifically, the addition of U18666A to acyl coenxyme A: cholesterol acetyltransferase (ACAT)-inhibited macrophages appeared to delay or suppress cell death (page 426, bottom of column 2; page 427, Table).

Kellner-Weibel et al. specifically teach that "other compounds (such as progesterone) that have characteristics similar to that of U18666A may play a role in maintaining cell integrity in the face of excess free cholesterol" (page 430, column 1, last sentence).

Thus, because both Houser et al. and Kellner-Weibel et al. teach amphiphilic/amphipathic compounds that inhibit the intracellular transport of cholesterol, it would have been obvious to one skilled in the art to substitute the utilization of U18666A for progesterone in the method of Houser et al. to achieve the predictable result of reducing aortic plaque load, inhibiting macrophage cell death, and inhibiting atherosclerotic lesional complications.

(ii) Applicant asserts that regarding Kellner-Weibel et al., the Examiner ignores the teaching that "the protective effect of U18666A was not due to a decrease in cellular FC concentrations because cells treated with an ACAT inhibitor accumulated similar amounts of FC in the presence or absence of U18666A". Applicant also argues that the statement made on page 429 under "Cholesterol Efflux" in Kellner-Weibel et al. teaches to inhibit intracellular transport of cholesterol to the plasma membrane. Applicant contends that in contrast, Applicant's invention is to inhibit intracellular transport of cholesterol to the endoplasmic reticulum but not the plasma membrane.

Applicant's arguments have been fully considered but are not found to be persuasive. The Examiner has not ignored the teaching in Kellner-Weibel et al. that the protective effect of U18666A was not due to a decrease in cellular FC concentrations. In fact, in the next sentence, Kellner-Weibel et al. state that "treatment with U18666A results in the sequestering of FC in a pool that prevents it from causing various responses to FC deposition in macrophages" (page 423, abstract). On page 429, under "Cholesterol Efflux", Kellner-Weibel et al. disclose that "at the present time we do not know the precise location of the cholesterol in these kinetic pools" and that "[f]urther experiments will be required to establish whether the pool(s) of excess cholesterol that induces cell death is exclusively in the plasma membrane". Thus, it is evident from Kellner-Weibel et al. that although the mechanism of action of U18666A is unclear, U18666A inhibits intracellular transport of cholesterol and delays or suppresses macrophage cell death (page 426, bottom of column 2; page 427, Table; page 428, column 2, first full paragraph). Although Applicant may have discovered that U18666A selectively blocks trafficking of FC to the endoplasmic reticulum but not to the plasma membrane to block macrophage death, "[t]he

discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Furthermore, when the claim recites using an old composition or structure and the "use" is directed to a result or property of that composition or structure, then the claim is anticipated. *In re May*, 574 F.2d 1082, 1090, 197 USPQ 601, 607 (CCPA 1978).

Conclusion

No claims are allowable.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bridget E. Bunner whose telephone number is (571) 272-0881. The examiner can normally be reached on 8:30-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manjunath Rao can be reached on (571) 272-0939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BEB
Art Unit 1647
24 July 2008

/Bridget E Bunner/
Primary Examiner, Art Unit 1647